

# COLOCOLIC INTUSSUSCEPTION IN CHILDREN: A CASE REPORT AND REVIEW OF THE LITERATURE.

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## INTRODUCTION

Intussusception is an acquired invagination of a proximal segment of the bowel (intussusceptum) into the distal segment (intussusciens). Nearly all cases of colocolic intussusception are caused by pathologic lead point, and the incidence of a lead point ranges from 1.5 to 12%.<sup>1</sup> The actual incidence is unknown due to their relative rarity, and the available literature consists mostly of case reports and case series. We reported a case of a 3-year-old child who developed colocolic intussusception as a result of a pedunculated sigmoid polyp.<sup>2</sup> The child failed saline reduction attempts and eventually needed a laparotomy

## CASE REPORT

A three-year-old boy presented with intermittent abdominal pain and passing out blood-stained stools for 1-week duration. The abdomen is soft, non-tender and no sign of peritonism. There is a palpable mass at the left iliac fossa area measuring 2x3cm. The abdominal ultrasonography (USG) revealed a short segment of 'target or pseudokidney sign' (Figure 1) at the left lumbar area measuring 2.7x3.4cm (AP x W) and echogenic lesion measuring 2x3cm with tubular stalk (Figure 2) suspected to be a polyp in keeping with colocolic intussusception. The child underwent laparotomy after failed USG-guided saline reduction. Intraoperatively, the intussusception was spontaneously reduced and there is a palpable intraluminal mass in the descending sigmoid junction (Figure 3). The descending colon was opened above the mass by longitudinal incision and a single pedunculated polyp measuring 3cm was found (Figure 4 and 5 ). The polyp was excised and the colotomy incision was closed. Postoperatively, the child recovered uneventfully and was allowed discharge on day 2 postoperative. Final HPE came back as juvenile polyp.

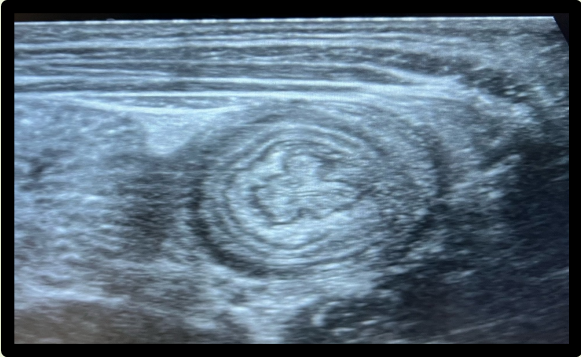


Figure 1: The USG scan showed 'target sign' at the left lumbar area

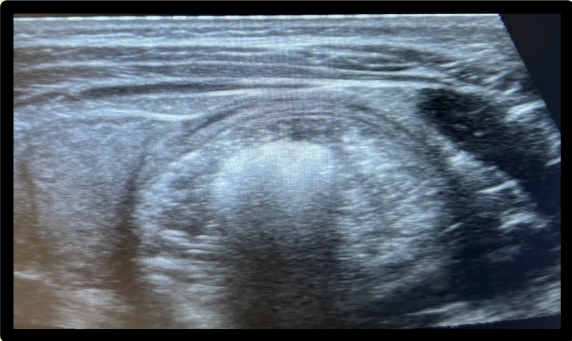


Figure 2 : USG scan showed echogenic lesion measuring 2x3cm with tubular stalk suspected to be a polyp



Figure 3 : Palpable intraluminal mass

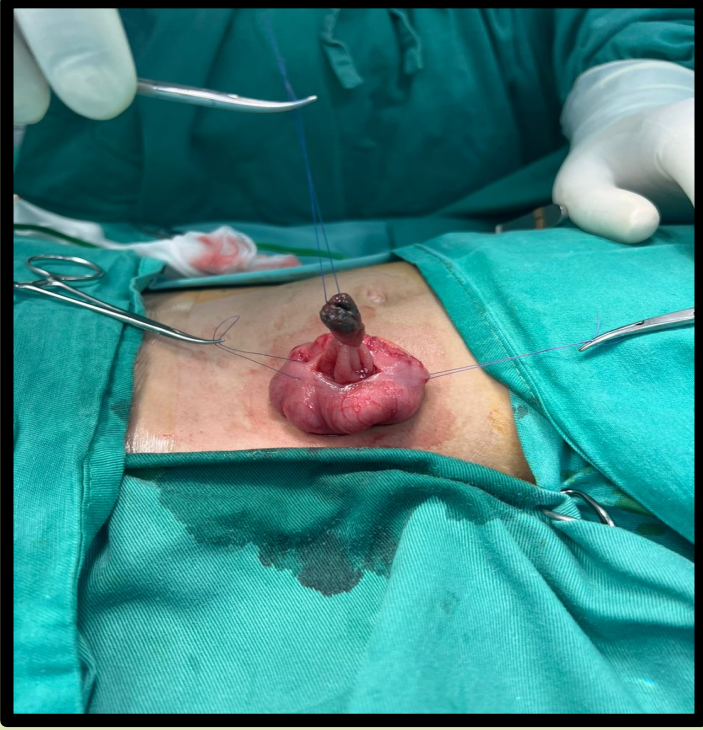


Figure 4 : Large pedunculated polyp measuring 2x3cm was identified acting as a pathologic lead



Figure 5 : The resected polyp

## DISCUSSION

Colocolic intussusception is less common than ileocolic intussusception among pediatric population. It usually occurs outside the typical range (6 months to 3 years) but the clinical presentation appears to be the same.<sup>3</sup> The exact incidence of colocolic intussusception is unknown and mainly based on case reports and case series. An intussusception that has an identifiable lesion that serves as the lead point is also known as secondary intussusception. The commonly identified lead point is a Meckel diverticulum, followed by juvenile polyps and duplication. Other causes are more rarely recognized as appendix, hemangiomas, carcinoid tumors, foreign body, ectopic gastric or pancreas mucosa, lipomas, and hamartomas from Peutz-Jegher syndrome . As reported in most literature, complete reduction by USG-Guided enema or saline might be impaired in the presence of lead point.<sup>4</sup> There is a high risk of recurrence even after a successful reduction. Colonoscopy and removal of polyps also can be performed following successful reduction in the absence of clinical signs of bowel obstruction or ischemia.<sup>5</sup> In our case, the patient had recurrence even after successful USG-guided saline reduction. Therefore, active intervention is usually necessary for colocolic intussusception by means of laparotomy, manual reduction and/or bowel resection based on intraoperative findings.

## CONCLUSION

Colocolic intussusception is infrequent in the peadiatric population and is normally associated with lead point. It tends to occur outside the typical range of 6 months to 3 years old. The aim of the treatment is reduction after proper clinical evaluation and resuscitation. Saline or enema reduction is feasible for the reduction of intussusception, but open surgery remains the primary treatment for the recurrence of failed reduction. The role of colonoscopy in selected cases, can be an alternative to open surgery and bowel resection.

### References

1. Tripathy PK, Jena PK (2016) Colocolic intussusception in a child with pathologic lead point along with intestinal malrotation – a rare case report and brief review. *J Clin Diagn Res*
2. Brundler MA, Kurek KC, Patel K, Jester I. Submucosal colonic lipoblastoma presenting with colo-colonic intussusception in an infant. *Pediatr Dev Pathol.* (2018) 21:401–5
3. Cho MJ, Nam CW, Choi SH, Hwang EH. Management of recurrent ileocolic intussusception. *J Pediatr Surg.* (2020) 55:2150–3. doi: 10.1016/j.jpedsurg.2019.09.039
4. Richer EJ, Dickson PN. Colocolic intussusceptions in children: a pictorial essay and review of the literature. *Emerg Radiol.* (2020) 27:97–102. doi: 10.1007/s10140-019-01727-7
5. Grant HW, Buccimazza I, Hadley GP (1996) A comparison of colocolic and ileo-colic intussusception. *J Pediatr Surg* 31(12):1607–1610